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Notice of Allowability	Application No.	Applicant(s)	
	10/724,750	HAMAMATSU ET AL.	
	Examiner	Art Unit	
	Michael P. Stafira	2886	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 1/25/2007.
2. ☒ The allowed claim(s) is/are 9,10,12,13.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| <ol style="list-style-type: none">1. <input type="checkbox"/> Notice of References Cited (PTO-892)2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none">5. <input type="checkbox"/> Notice of Informal Patent Application6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____7. <input type="checkbox"/> Examiner's Amendment/Comment8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance9. <input type="checkbox"/> Other _____ |
|--|--|

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Allowable Subject Matter

2. Claims 9, 10, 12, 13 are allowed over the prior art of record.
3. The following is an examiner's statement of reasons for allowance:

Regarding claim 9, the prior art fails to disclose or make obvious a method for inspecting defects having the steps of each micro-mirror operation of the micro-mirror array device selectively shields the diffraction light patterns by reflecting the diffract light in a direction where a sensor for detecting the image signal corresponding to the transmission light reflected by each micro-mirror operation cannot receive the selective shielding diffracted light patterns, and said selective shielding of said diffraction light pattern in said detecting step includes observing a Fourier transform image as the selective shielding diffracted light patterns in a Fourier transform plane and controlling each micro-mirror operation of the micro-mirror array device in accordance with the Fourier transform image as the selective shielding diffracted light patterns, and in combination with the other recited limitations of claim 9.

Regarding claim 10, the prior art fails to disclose or make obvious a method for inspecting defects having the steps of each micro-mirror operation of the micro-mirror array device selectively shields the diffraction light patterns by reflecting the diffract light in a

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direction where a sensor for detecting the image signal corresponding to the transmission light reflected by each micro-mirror operation cannot receive the selective shielding diffracted light patterns, and each micro-mirror operation of the micro-mirror array device is performed so that the each micro-mirror operation is supported by a support provided on a base and is driven by electrostatic attraction and repulsion with an electrode provided on the base, and in combination with the other recited limitations of claim 10.

Regarding claim 12, the prior art fails to disclose or make obvious an apparatus for inspecting defects having a shielding unit further comprises an optical system wherein each micro-mirror operation of the micro-mirror array device selectively shields the diffraction light patterns by reflecting the diffracted light in a direction where a sensor for the detected light reflected by each micro-mirror operation of the micro-mirror array device into the image signal cannot receive the selective shielding diffracted light patterns, and said shielding unit further provides an optical observation unit which observes a Fourier transform image as the selective shielding diffracted light patterns in a Fourier transform plane and a control unit which controls each micro-mirror operation of the micro-mirror array device in accordance with the Fourier transform image as the selective shielding diffracted light patterns, and in combination with the other recited limitations of claim 12.

Regarding claim 13, the prior art fails to disclose or make obvious an apparatus for inspecting defects having a shielding unit further comprises an optical system wherein each micro-mirror operation of the micro-mirror array device selectively shields the diffraction light patterns by reflecting the diffracted light in a direction where a sensor for the detected light reflected by each micro-mirror operation of the micro-mirror array device into the image signal

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cannot receive the selective shielding diffracted light patterns, and each micro-mirror operation of the micro-mirror array device is constructed so that the each micro-mirror is supported by a support being provided on a base and is driven by electrostatic attraction and repulsion with an electrode provided on the base, and in combination with the other recited limitations of claim 13.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Stafira whose telephone number is 571-272-2430. The examiner can normally be reached on 4/10 Schedule Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifur Chowdhury can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael P. Stafira
Primary Examiner
Art Unit 2886

April 3, 2007